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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SY, MARIANO ONG

ART UNIT

PAPER NUMBER

3683

DATE MAILED: 12/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/772,965

Applicant(s)

GOGO, KAZUHIKO

Examiner

Mariano Sy

Art Unit

3683

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 2 and 4 is/are allowed.
- 6) ☒ Claim(s) 1, 3 and 5 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on August 9, 2005 has been entered.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. There was no disclosure in the specification of the relationship of the thickness between the bridge section and the combination of inner pad, outer pad, and brake disk.

Claim Rejections - 35 USC § 102

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4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Rath (US 3,782,510).

Re-claim 1 Rath disclosed, as shown in fig. 1-4, a disk brake unit comprising: at least one piston 28 built into a caliper body 12 having a substantially U-shaped cross-section with an outer section 13 and an inner section 15 connected by a bridge section 14, an outer pad attached to outer section, an inner pad attached to inner section, and an outer periphery of a brake disk inserted between outer and inner pads, wherein part of the piston projects beyond an outer peripheral edge of the brake disk to an outer side, the outer and inner pads do not project out further than the outer peripheral edge of the brake disk, and part of the bridge section projects further radially inwards (see fig. 3) than the outer peripheral edge of the piston and the projecting part of the bridge section extends from the inner section to the outer section of the caliper body, wherein a thickness of the bridge section is sufficiently large to prevent an exterior surface of the bridge section from projecting radially.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rath in view of Reeves (US 6,478,121).

Re-claim 3 Rath failed to disclose wherein there are a plurality of pistons, the plurality of pistons being lined up along the outer peripheral edge of the brake disk at specified intervals.

Reeves teaches, as shown in fig. 4-9, a disc brake caliper having a plurality of pistons, the plurality of pistons being lined up along the outer peripheral edge of the brake disk at specified intervals, see col. 4, lines 6-13.

It is old and well known in the art for a brake caliper having a plurality of pistons and it would have been obvious to one of ordinary skill in the art to modify the caliper of Rath with a plurality of pistons, in view of the teaching of Reeves, in order to decrease the size of the caliper by having smaller pistons instead of a single large piston.

8. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rath.

Re-claim 5 Rath was silent to disclose wherein the thickness of the bridge section is at least as thick as a thickness combination of the inner pad, the outer pad, and the brake disk.

It would have been obvious to one of ordinary skill in the art to have modify the disk brake unit of Rath with the thickness of the bridge section is at least as thick as a thickness combination of the inner pad, the outer pad, and the brake disk is a mater of

design choice depending upon braking force needed and size of disk brake unit required for specific type of application.

9. Claims 2 and 4 are allowed.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Rath et al. (US 3,708,043)

Woo et al. (US 4,386,682)

Johannesen et al. (US 4,418,798)

Hirashita (US 4,915,198).

Bach et al. (US 4,609,078)

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mariano Sy whose telephone number is 571-272-7126. The examiner can normally be reached on Mon.-Fri. from 8:30 A.M. to 2:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James McClellan, can be reached on 571-272-6786. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

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Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

 M. Sy

November 29, 2005


JAMES MCCLELLAN
PRIMARY EXAMINER
12/4/05